



## **DESIGNER NOTES**

BODY IS DESIGNED FOR AN EQUIVALENT FLUID PRESSURE OF 40 LBS. PER SO. FT. 2'-O" SURCHARGE AND SUPERSTRUCTURE REACTIONS "P".

WINCS ARE DESIGNED FOR AN EQUIVALENT FLUID PRESSURE OF 33 LBS.PER SO.FT. AND A 2'-O" SURCHARGE. A 10 KIP LATERAL RESISTANCE IS USED FOR THE GROUP OF 2 WING PILES. NO LATERAL RESISTANCE IS USED FOR SINGLE PILES IN WING.

FRONT ROW PILES ARE DESIGNED FOR AN EQUIVALENT FLUID PRESSURE OF 40 LBS. PER SO. FT. AND SUPERSTRUCTURE REACTIONS "P". BACK ROW PILE DESIGN IS BASED ON AN EQUIVALENT FLUID PRESSURE OF 20 LBS. PER SO. FT. AND "P".

UNIT WEIGHT OF SOIL IS ASSUMED AS 120 LBS. PER CU. FT.

BRIDGE SEATS BETWEEN BEARINGS SHALL SLOPE 1" FROM FRONT FACE OF BACKWALL.

fy = 60,000 P.S.I. f'c = 3,500 P.S.I. LOAD FACTOR (BODY) = 1.3 (5/3 LL + 1.3 E) LOAD FACTOR (WINGS) = 1.3 (5/3 LL + 5/3 E)

PAY LIMITS FOR EXCAVATION FOR STRUCTURES & GRANULAR BACKFILL IS SHOWN IN CHAPTER 12 OF THE BRIDGE MANUAL.

ALL WING BARS SHALL BE EPOXY COATED.

WHEN TYPE "F", "W" OR "M" RAILING IS USED, LOCATE NAME PLATE ON FIRST RIGHT WING TRAVELING UP STATION.

FOR MODULAR EXPANSION JOINTS W/CONC. DIAPH, RUNNING TO EDGE OF DECK: IF SIDEWALL IS USED, FORM SIDEWALL 2" BELOW CONC. DIAPH.

## ABUTMENT A4 PILE FOOTING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DEVELOPMENT SECTION

APPROVED:\_\_ \_Stanley W. Woods\_ 7-04

12.6